

FORTIETH ANNUAL REPORT

OF THE

GRAFTON STATE HOSPITAL

AT

NORTH GRAFTON AND WORCESTER,

FOR THE

YEAR ENDING NOVEMBER 30, 1917.



BOSTON:  
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,  
32 DERNE STREET.  
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APPROVED BY THE  
SUPERVISOR OF ADMINISTRATION.

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ERNEST P. BRIGHAM, D.M.D.,	.	.	GRAFTON DEPARTMENT.



# The Commonwealth of Massachusetts.

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## TRUSTEES' REPORT.

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*To His Excellency the Governor and the Honorable Council.*

The trustees of the Grafton State Hospital respectfully submit the following report of the affairs of the hospital for the fiscal year ending Nov. 30, 1917.

The vacancy created in the Board of Trustees by the expiration of the term of Mr. Roger W. Cutler of Dover was filled by his reappointment in February.

It affords us considerable pleasure to report that all of the ten buildings, which were unoccupied at the Grafton Department when this Board assumed charge of the institution, are now fully occupied and used.

Chapter 123 of the Resolves of 1917 made the following appropriations for this hospital:—

For the installation of refrigerating apparatus in the storehouse at Grafton, . . . . .	\$9,000
For fire protection and fire escapes, . . . . .	6,375
For laundry machinery, . . . . .	3,500
For remodeling the heating plant in the Summer Street building, 89,303	

The contract for the remodeling of the heating plant at the Worcester Department has been awarded by the Commission on Mental Diseases in Boston, and the work is now well under way.

The material for the installation of new stairways has also been purchased by the Commission, and this work will be undertaken in a short time by the hospital employees, there not being sufficient money in the appropriation to pay for the necessary labor at present prices.

Contracts have also been awarded for insulating the refrigerating rooms at the storehouse of the Grafton Department, and the work is well under way.

The laundry machinery, allowed by the Legislature, has already been purchased, and the capacity of the laundry at the Grafton Department will be nearly doubled.

An act to authorize the Commission on Mental Diseases to acquire an additional water supply for the Grafton State Hospital, under chapter 313 of the General Acts of 1917, was approved May 25, 1917. By this act the source of supply is limited to the town of Grafton; and although an engineer representing the Commission on Mental Diseases has made a careful investigation of the possible sources of water supply for the hospital, the problem of obtaining water has not as yet been satisfactorily solved. The Board is of the opinion that a satisfactory water supply cannot be obtained within the borders of Grafton, and would strongly urge that an amendment to the above act be made which would enable the Commission to obtain water from the metropolitan supply, Hockomocko Pond, or from some other source. This is a matter which should receive immediate attention, as it has been very difficult at times during the last few months to obtain sufficient water for the needs of the institution. It has often been necessary to restrict bathing facilities of the patients. This situation would have been very serious had there been a fire, as it would have been impossible to have used water for fire protection without using practically all the water available for drinking purposes.

House Bill No. 1059, introduced by Representative Arthur W. Frail, failed of passage at the last session of the Legislature. This bill provided for the construction of a State highway between Westborough and North Grafton, — about  $2\frac{1}{2}$  miles of new road. This would complete a direct route from Boston to Worcester by way of Framingham and Westborough. Many of the supplies of the hospital have to be hauled over this road from Worcester to the Grafton Department daily. As the Grafton Department provides for over 1,400 patients and has nearly 300 employees, the importance of facilitating delivery of supplies at this place is readily apparent. It would certainly be advantageous to the Commonwealth to render this site more available, owing to the necessity of developing the property. We would respectfully request that an appropriation for this road be made by the Legislature this winter.

We would also invite attention to the need of further apparatus for fire protection as outlined in the report of the superintendent. This is a matter which has been reported upon at various times by the District Police and should, in our opinion, receive early consideration.

We feel that special attention should be called to the necessity of constructing a coal trestle at the Grafton Department. The present railway spur is only temporary in character, and requires frequent repairs to make the delivery of coal possible. We feel that this is a condition which should be remedied as soon as possible.

The boiler blowers and grates, referred to in the superintendent's report, should be allowed if the buildings at Grafton are to be properly heated during the winter.

In conclusion, we wish to emphasize again the necessity of an increase in the wage schedule. It has been found impossible to obtain a sufficient number of employees to properly care for the patients in the hospital at the wages now paid. We are also of the opinion that whatever schedule is adopted should be uniformly used in all hospitals for the insane. At the present time employees in one hospital take advantage of the better pay offered at some other institution, a condition of affairs which should not be tolerated, and which is detrimental to the best interests of the Commonwealth.

We regret the necessity of asking for an increase in the amount of money appropriated for the maintenance of the hospital. The expenditures for the year just ended amounted to \$524,888.40, representing a weekly per capita cost of \$5.394. We will, of course, have to provide for a larger population during the coming year, and will need an appropriation which will make it possible for us to meet the increased cost of all commodities. In view of existing conditions, we feel that the amount asked for the coming year represents a very conservative estimate of our needs.

Respectfully submitted,

MARGARET A. CASHMAN,

*Secretary of Trustees.*

## SUPERINTENDENT'S REPORT.

*To the Trustees of the Grafton State Hospital.*

In accordance with the provisions of the statutes, I am submitting for your consideration the fortieth annual report of the superintendent of the Grafton State Hospital, for the statistical year ending Sept. 30, 1917, and the fiscal year ending Nov. 30, 1917.

## MOVEMENT OF POPULATION.

The census of the hospital on Sept. 30, 1916, was 1,799, — 837 men and 962 women. Of this number, 810 men and 911 women, a total of 1,721, were in the hospital. Twenty-nine women were in family care, 28 out on visit, and 21 on escape. Four hundred and seventy-four patients were admitted during the year. Of these, 284 were men and 190 women. Seventy-nine of this number, including 54 men and 25 women, were committed directly to the care of the hospital. Three hundred and ninety-five, including 230 men and 165 women, were received by transfer from other institutions. Seven voluntary cases, including 5 men and 2 women, were admitted during the year. The whole number of cases treated during the year was 2,273, — 1,121 men and 1,152 women. Two hundred and eighty-six cases, including 163 men and 123 women, were dismissed during the year. Of this number, 72 were discharged, 2 as recovered, 18 as capable of self-support, 27 as improved, and 24 as not improved. One hundred and seven men and 89 women, a total of 196, died during the year, and 13 men and 4 women, a total of 17, were transferred to other institutions.

The average daily population of the hospital for the year ending Sept. 30, 1917, was 1,812.50. The average daily number in family care was 22.91. The average daily number under

care was 1,835.41. The average daily number of private patients was 6.87.

The census on Sept. 30, 1917, was 1,987, — 958 men and 1,029 women. Of this number, 919 men and 1,001 women, a total of 1,920, were in the hospital. Eighteen women were in family care. There were 8 private patients, all the others being State charges.

The psychoses represented by the first admissions during the year were as follows: —

PSYCHOSES.	Men.	Women.	Total.
Senile, . . . . . . . .	—	1	1
General paralysis, . . . . .	2	—	2
Psychoses with tabes, . . . . .	1	—	1
Epileptic psychoses, . . . . .	7	6	13
Mental deficiency without psychoses, . . . .	13	5	18
Epilepsy without psychoses, . . . .	1	—	1
Total, . . . . . . . .	24	12	36

The psychoses represented by all commitments were as follows: —

PSYCHOSES.	Men.	Women.	Total.
Senile, . . . . . . . .	—	1	1
With cerebral arteriosclerosis, . . . . .	1	—	1
General paralysis, . . . . .	14	4	18
With cerebral syphilis, . . . . .	1	—	1
With tabes, . . . . .	2	—	2
Alcoholic, . . . . .	2	—	2
With delirium of unknown origin, . . . . .	1	—	1
With constitutional psychopathic inferiority, . . .	1	—	1
Epileptic, . . . . .	16	15	31
Undiagnosed, . . . . .	1	—	1
Mental deficiency without psychoses, . . . .	13	5	18
Epilepsy without psychoses, . . . .	2	—	2
Total, . . . . . . . .	54	25	79

The psychoses represented by the cases discharged were as follows:—

PSYCHOSES.	Men.	Women.	Total.
Senile, . . . . . . . .	-	1	1
With cerebral arteriosclerosis, . . . . .	1	-	1
General paralysis, . . . . .	3	-	3
With cerebral syphilis, . . . . .	2	1	3
Alcoholic, . . . . .	8	1	9
Manic-depressive, . . . . .	-	2	2
Dementia præcox, . . . . .	11	1	12
With constitutional psychopathic inferiority, . .	1	-	1
Epileptic, . . . . .	5	1	6
Undiagnosed, . . . . .	1	1	2
Mental deficiency without psychoses, . . .	7	10	17
Epilepsy without psychoses, . . .	-	2	2
Total, . . . . .	39	20	59

The psychoses represented by the deaths occurring during the year were as follows:—

PSYCHOSES.	Men.	Women.	Total.
Traumatic, . . . . . . . .	-	1	1
Senile, . . . . . . . .	4	8	12
With cerebral arteriosclerosis, . . . . .	2	-	2
General paralysis, . . . . .	14	4	18
With tabes, . . . . . . . .	1	-	1
Alcoholic, . . . . . . . .	7	7	14
Due to drugs and exogenous toxins, . . . . .	-	1	1
With delirium of unknown origin, . . . . .	1	-	1
Manic-depressive, . . . . . . . .	2	8	10
Dementia præcox, . . . . . . . .	29	32	61
Paranoia and paranoid conditions, . . . . .	1	-	1
With mental deficiency, . . . . . . . .	1	4	5
With constitutional psychopathic inferiority, . .	1	-	1
Epileptic, . . . . . . . .	40	17	57
Mental deficiency without psychoses, . . .	4	7	11
Epilepsy without psychoses, . . . .	-	1	1
Total, . . . . . . . .	107	90	197

## GENERAL HEALTH OF THE HOSPITAL.

The general health of the hospital population was very good during the year, aside from a mild epidemic of enteritis occurring during the summer months, at both the Grafton and Worcester departments. A man, eighty-four years of age, at the Worcester Department, sustained a fracture of the right femur as the result of an accidental fall. A female patient in the Grafton Department was operated on in December for appendicitis. A patient at the Worcester Department was assaulted by an attendant on June 3, and sustained two fractured ribs as the result of the assault. The attendant was at once arrested, tried the following day, and sentenced to sixty days in the House of Correction. A female patient was operated on at the Worcester Department on March 27 for tubercular peritonitis, and made a good recovery. A female patient was operated on for appendicitis at the Grafton Department on March 10. A woman at the Grafton Department sustained a dislocation of the right arm as the result of a fall. There were several operations for strangulated hernia, all with good recoveries. A nurse at the Grafton Department was operated on for appendicitis in the month of July. A man was assaulted by another patient at the Elms A building, in Grafton, on August 14, and died afterwards as the result of his injuries. The assault was one which could not have been anticipated or prevented, and was witnessed by an attendant and reported to the medical examiner of the district and to the Commission on Mental Diseases. It occurred as the result of a sudden impulse on the part of a patient who had not committed any dangerous assaults previously. The matter was investigated thoroughly by Judge Fowler, and by the Commission. These investigations showed that the occurrence was not due to any neglect on the part of the employees of the institution. A male attendant at the Grafton Department was operated on for appendicitis during the month of September. A patient from the Grafton Department was run over and killed by a train near his home, in Walpole, on September 18. A nurse at the Worcester Department was sent to the isolation hospital in October for diphtheria, and one nurse

died at the Grafton Department from typhoid fever. A female patient at the Grafton Department who had shown no evidences of suicidal tendencies, and who had enjoyed a parole of the grounds for several years, committed suicide as the result apparently of a sudden impulse, by throwing herself into the reservoir on November 9. The total number of deaths for the year was 197. The number of autopsies performed at the hospital for the year was 112, constituting 54.64 per cent. of the total number of deaths.

#### EMPLOYEES.

There has been a large number of changes in the personnel of the nurses and attendants employed in the hospital during the year. There were 349 persons employed in the institution on Nov. 30, 1916, and 390 on Nov. 30, 1917. Nine hundred and twenty-six entered the service during the year. There were 472 resignations and 413 discharges. The rotation of the employees for the year was 3.16, representing a percentage of 1,255 persons having occupied 404 positions. The usual difficulty has been encountered during the year in obtaining satisfactory employees for the hospital. This is due, to a certain extent, to the more or less unpleasant nature of the work itself, but primarily to the inadequate wages paid. It has been especially difficult to maintain a sufficient force of employees at the Grafton Department on account of its remoteness from the city. The necessity of an increased wage schedule is greater than ever before. It is equally important that all the hospitals should operate under a uniform schedule, employees frequently going from one hospital to another to take advantage of a higher rate of wages. A new schedule would, of course, be useless unless the appropriations, as made by the Legislature, are sufficiently large to cover the needs of the institution. For this reason it might be desirable to make a uniform wage schedule statutory.

#### THE MEDICAL SERVICE OF THE HOSPITAL.

There have been several changes in the medical staff during the year. Dr. A. E. Pattrell was promoted to the position of first assistant physician at the Grafton Department on July 1.

Dr. H. Wilbur Smith of Groton was appointed assistant physician on Dec. 23, 1916, and assigned to the male service at Grafton. Dr. Richard H. Price of Boston was appointed to the position of assistant physician on Aug. 8, 1917, and has been on duty at the Grafton Department. Dr. Michael J. O'Meara of Worcester was appointed assistant physician on Oct. 9, 1917, and assigned to the Worcester Department. Staff meetings have been held daily during the week on Mondays, Wednesdays and Fridays at the Grafton Department, and on Tuesdays, Thursdays and Saturdays at the Worcester Department. A fairly well-equipped operating room was installed during the year in the Pines B building at Grafton, and a sterilizing equipment has been added to the operating room at Worcester. Attention is again called to the necessity of obtaining additional appropriations for the purpose of installing hydrotherapeutic equipments at both the Grafton and Worcester departments, as well as for the installation of continuous baths. The pathological work of the hospital has been done by Dr. D. A. Thom, assistant pathologist to the Commission on Mental Diseases. Under his direction, special treatments have been given for neurosyphilis, with special attention to general paresis. To facilitate this work the Commission has arranged to have such cases committed directly to the Worcester Department. Dr. Thom resigned during the month of August to enter the Medical Reserve Corps of the United States Army. This work will be continued by Dr. Hiram L. Horsman, the first assistant at the Worcester Department, and Dr. Ada F. Harris. The pathological work will be done by Dr. Myrtelle M. Canavan, assistant pathologist to the Commission on Mental Diseases.

Sixty-two cases of general paresis and 5 cases of cerebro-spinal syphilis were admitted during the year. Forty-one cases were given the intravenous salvarsan treatment, and 12 cases the intraventricular treatment. This method of treating neurosyphilis was used for the first time in Massachusetts in this hospital during the present year. There have been 15 operations for this purpose. The results have been quite gratifying, and are unquestionably sufficient to warrant further treatments. The following is a summary of the special treatments for neurosyphilis: —

Forty-one patients suffering with general paresis received intravenous injections of diarsenol; number of injections, 602.

Fifteen received from one to ten intravenous treatments each; total average amount each received, 2.7 grams diarsenol. These were advanced cases, and but three have shown improvement; two clinical, one clinical and serological.

Nine received from eleven to twenty intravenous treatments each; total average amount each received, 7.1 grams diarsenol. Four have shown improvement, three continuing treatment, two no improvement. Three have shown marked clinical improvement; one clinical and serological.

Five received from twenty-one to thirty intravenous treatments; total average amount each received, 11.6 grams diarsenol. Five have shown clinical improvement; two clinical and serological.

Five received from thirty-one to thirty-six intravenous treatments; average amount each received, 15.0 grams diarsenol. Three have shown clinical, one clinical and serological improvement; two temporary clinical improvement.

Seven patients have received, in addition to intravenous treatments, intraventricular and subdural injections of diarsenolized serum, reinforced with 3 to 5 milligrams diarsenol, or intraspinous injections of diarsenolized serum.

Four received from one to ten intravenous treatments; total average amount, 3.0 grams diarsenol, with seven intraventricular, sixteen subdural and one intraspinous treatments. Three have shown clinical improvement, one marked clinical and serological.

Two received from eleven to twenty intravenous treatments; total average amount 7.6 grams diarsenol, with four intraventricular, six subdural and one intraspinous treatments. One has shown marked clinical improvement, one no change.

One received twenty intravenous treatments; total amount, 11.3 grams diarsenol; thirteen intraspinous treatments, with both clinical and serological improvement.

Five advanced cases have been treated by intraventricular and subdural methods without intravenous treatments. No improvements noted.

Two cases of tabo-paresis have been given five intraspinous injections without intravenous treatment, with no improvement noted.

Eleven cases of cerebrospinal syphilis have been treated intravenously.

Six received from one to ten treatments; total average amount each received, 2.8 grams diarsenol; one received one intraspinous treatment. One has shown both clinical and serological improvement, three have

shown clinical without serological improvement, one has shown serological without clinical improvement, one no change.

Four received from eleven to twenty treatments; total average amount each received, 5.7 grams diarsenol. One has shown both clinical and serological improvement. Three have shown serological without clinical improvement.

One received twenty-seven treatments; total amount, 13.7 grams diarsenol, and has shown both clinical and serological improvement.

Three cases of tabes have been treated intravenously and intraspinally.

Two received from one to ten intravenous treatments; total average amount each received, 2.8 grams diarsenol, with four intraspinal treatments. Two have shown temporary clinical improvement.

One received sixteen intravenous treatments; total amount, 8.7 grams diarsenol, and six intraspinal treatments with no improvement.

Two cases with secondary lesions of syphilis have been treated with clinical improvement in both.

Total number of paretics treated, . . . . .	48
Total number of cerebrospinal syphilitics treated, . . . . .	11
Total number of tabes treated, . . . . .	3
Total number of secondary lesions of syphilis treated, . . . . .	2
Total number of intravenous treatments, . . . . .	763
Total number of intraventricular treatments, . . . . .	19
Total number of subdural treatments, . . . . .	37
Total number of intraspinal treatments, . . . . .	38

Dental rooms have been opened at both the Grafton and the Worcester departments, and dentists are now making regular weekly visits at both places.

An intensive study of epileptic psychoses has been made at the Grafton Department during the summer. This will be made the subject of a special report at a later date.

The industrial and social service work of the institution has been carried on as usual. The industrial departments were removed from the wards at Worcester, and installed in the building formerly used as a carpenter shop. All of the industries formerly housed in the Elms D building at Grafton were removed to the basement of the Elms A building, and

industrial work has been carried on there on a much larger scale than was possible heretofore.

The work of the training school for nurses has been continued very successfully during the year under the direction of the superintendent of nurses, Miss P. Jean Porteous. The junior class at Grafton consists of 18 members, the intermediate class of 6, and the senior class of 6. At the Worcester Department there are 5 in the junior class, 4 in the intermediate, and 1 in the senior class. The course of study outlined by the Commission on Mental Diseases is being followed at both departments.

It is obvious at this time that the entire facilities of the hospital cannot be adequately utilized by the transfer of patients from other institutions. The present capacity of the hospital is represented by a minimum of 2,035 beds. The average daily population for the last statistical year was 1,812.50. Notwithstanding the fact that there were 395 patients transferred from other institutions, the wards have not been filled at any one time during the year. The number of deaths and discharges in an institution of this size is so great that the vacancies cannot be filled by transfers from other hospitals. I would therefore suggest that arrangements be made to send more commitments to Grafton from either the Worcester or Boston districts. Owing to the remoteness of the hospital from the metropolitan center, it would seem more desirable to have cases committed from Worcester. With the remodeling of the heating plant at the Worcester Department and the completion of the new stairways, the Summer Street building will be an ideal place for the reception and distribution of such patients as may be committed to the custody of this institution from the Worcester district under the direction of the Commission on Mental Diseases.

#### IMPROVEMENTS DURING THE YEAR.

##### *Grafton Department.*

All of the buildings at Grafton have been occupied, and are now in permanent use. The Oaks Service building was opened on May 2, 1917, the Elms B building on Feb. 12, 1917, and the

Elms Service building on Feb. 14, 1917. The grading and road building in front of the administration building have been completed. Grading and road building have been continued at the Oaks group, and the service road to the Elms group will be finished soon. The steam line connecting the Elms group with the main power house has been finished, and is now in operation. The two boilers formerly located at the Elms group have been removed to the main boiler house, and the concrete chimney under process of construction during the preceding year has been finished, and is now in use. The room in the laundry and power house building formerly used as a carpenter shop has been remodeled and made into an excellent bakery. All the bread is now baked at Grafton, instead of being delivered daily from the Worcester Department, as was done formerly. Additional room has been provided at the laundry of the Grafton Department, and new machinery is being installed at the present time. This will practically double the capacity of the laundry. The refrigerator at the Willows service building was remodeled during the year, and new insulation installed. The large stock of lumber which was formerly stored in the basement of the building at Summer Street was removed during the year to the new carpenter shop at Grafton. The work on the Willows farmhouse is rapidly nearing completion. It will be finished during the coming winter.

The training school was provided with a lecture room in the Pines B building during the year.

The storehouse at Grafton has been connected with the sewerage system. Contracts have been awarded for the installation of a refrigerating plant at the storehouse in Grafton, which will furnish facilities for taking care of meat, butter, eggs, etc., at that place. This will do away with the necessity of hauling such supplies from Worcester. A mending room has been installed in the Pines B building, and the room formerly used for that purpose at the laundry building is now used as a sorting room. After the removal of the boilers from the Elms power plant, the chimney at that place was taken down by a Worcester firm. The bricks from this chimney, together with other materials on hand, were used in the erec-

tion of a considerable addition to the laundry building at Grafton. This will be used as a receiving room, and will ultimately furnish additional space for washing machines.

The industrial department at the Oaks group, formerly housed in the farmhouse, has been removed to the lower floor of the Oaks A building, previously used as a kitchen.

The women's infirmary ward has been removed from the Pines C building to the Pines A building. The employees' cottage was painted during the summer, and extensive repairs were made to the cow barn. A cinder walk running from the officers' cottage to the employees' cottage was built during the year. The lower floor of the Oaks D building is now being used as an infirmary ward, and the upper floor has been devoted to the care of tubercular patients. All male patients suffering from tuberculosis are now transferred to this ward.

New window guards were installed at the Oaks D building.

During the summer the henhouses at the Oaks group were removed from the immediate vicinity of the wards and located in the adjoining woods.

The tailor shop was removed from the upper floor of the Elms A building to the basement. The shoe shop was also removed from the basement of the Elms cottage to the industrial rooms in the Elms A building.

A time recorder was placed in operation in the office of the Oaks group during the year.

A moving-picture machine was installed in the Pines C building, and entertainments are held weekly for the benefit of the patients.

A Roman Catholic chaplain has been appointed for the Grafton Department, and masses are now held weekly instead of on alternate Sundays as heretofore.

The old wooden building formerly used as a blacksmith shop at the Grafton Department was removed during the summer.

Several of the rooms on the third floor of the laundry building at Grafton have been finished, and are now occupied by employees.

Bread cutters and butter cutters have been installed in the various kitchens at both departments, and have resulted in a material saving.

Galvanized iron shelving has replaced the old wooden shelves in the refrigerators during the year. An automatic refrigerating machine was installed in the Oaks service building. This machinery furnishes refrigeration for the kitchen, and produces 500 pounds of artificial ice on alternate days.

The dining-room tables at the Oaks and Elms service buildings were refinished recently, and are greatly improved in appearance.

Owing to a break in the sewer line beneath the floor of the Elms A building, a new sewer at that place was necessary.

The space available for the burial of bodies in the hospital lot at Hope Cemetery, Worcester, was exhausted sometime ago, and it has been necessary to find a new place for the burial of the dead. After a careful consideration of the subject, it was deemed desirable by the trustees to establish a cemetery on the hospital grounds, and a site was selected for this purpose on a plot of ground north of the Willows group at Grafton. This lot is bounded on the north by Cherry Street, on the east by Green Street, on the south by Branch Street, and on the west by a hospital road connecting Cherry with Branch Street. Permission to use this lot for cemetery purposes was granted by the board of health of Shrewsbury. The plot will provide accommodations for over 3,000 bodies.

#### *Worcester Department.*

The renovation of bathrooms has been continued during the year. Linoleum has been installed in a number of the wards and a sufficient amount purchased to provide for all of the wards in the Worcester Department. The heating plant at the greenhouse was remodeled during the year. A number of the wards have been repainted, and the repainting of the entire building will be completed soon. New cork insulation has been installed in the refrigerators adjoining the main kitchen, and the old meat refrigerator will be used for scullery purposes. The wash room in the laundry at Summer Street was remodeled during the year, and new machinery installed. All of the straw and cedar mattresses have been replaced by hair mattresses. The training school has been provided with a very satisfactory lecture room, which was formerly used for

office purposes. New window guards have been purchased for ward 17. Time recorders were installed in the office, and the employees' dining-rooms have been removed from the wards and more adequate facilities provided for that purpose elsewhere.

A bronze tablet was installed in the main hallway near the medical office in the Worcester Department, in recognition of the generosity of Martha Johonnot, Abigail Wheeler, Nathaniel MacCarthy, Ziba Storrs and Enoch Flagg, whose liberal contributions from 1833 to 1862 added materially to the comfort and welfare of the patients who have occupied the building on Summer Street.

Contracts have been awarded by the Commission on Mental Diseases for the erection of a new boiler house at the Worcester Department, as well as for the installation of a new heating system throughout the entire building. Material has been purchased by the Commission for the installation of new fire-proof stairways to replace the old wooden ones now in use. The work necessary will be done entirely by hospital employees. The new heating plant and the fireproof stairways will render the building at the Worcester Department highly satisfactory for the care of the insane in every way.

#### NEEDS OF THE HOSPITAL FOR THE COMING YEAR.

##### *Special Appropriations.*

1. *Chapel and Assembly Hall, Grafton, \$130,000.* — The only place available for religious services at the present time, at the Grafton Department, is in the basement of one of the buildings occupied by women patients. This is not a suitable location, although Protestant, Catholic and Jewish services have been held regularly. There is no place available for the entertainment of the patients at the Grafton Department, except a day hall in one of the ward buildings. It is urgently recommended that a building for these various purposes be erected at the earliest possible moment. In view of the fact that the Grafton Department provides for over 1,400 patients and nearly 300 employees, the necessity for such a building should be readily apparent. It will not be possible to erect a

suitable hall of sufficient size, at the present prices, for less than \$130,000.

2. *Coal Trestle and Track Scales, Grafton, \$10,000.* — All of the coal now used in the main power plant at the Grafton Department is conveyed to the boiler house by means of a short switch from the Boston & Albany tracks. This switch was laid on a low dirt embankment without any supports, being intended only for temporary use, and should be replaced by a trestle as soon as possible. The present tracks frequently settle and this makes numerous repairs necessary. A trestle would furnish the department with a permanent means of delivering coal at the power plant, and would greatly facilitate the handling of coal at the boiler room. The amount requested would also furnish provision for the installation of track scales. As there is no means at present of weighing the coal received at the power house, the installation of scales would be highly desirable. This would enable us to check up the weight of the coal received with the railroad and mine weights of the fuel purchased.

3. *Sewage Connections for the Power House, Carpenter Shop and Storehouse at Grafton, \$2,300.* — The power house, carpenter shop and storehouse buildings are located at such a level that the sewage from these buildings cannot be emptied into the main sewer line without the installation of a pumping plant. The State Department of Health has authorized us to empty the sewage from these buildings temporarily into the filter bed located in the Assabet valley. This is a condition of affairs which should be remedied in the very near future, as the State Department of Health objects to the permanent disposal of sewage in this way.

4. *Fire Protection, \$12,745.* — The inspectors of the District Police have on frequent occasions called attention to the need of adequate fire protection for both the Grafton and Worcester departments. The only fire escape on the building at Worcester, which houses 550 patients, is one on the central part of the building, occupied by the administrative departments, and does not extend to the ground. The inspectors have also recommended the completion of the fire escapes on the laundry building at Worcester. There are no fire escapes on the Elms

nurses' home or on the Pines nurses' home at Grafton, both three-story buildings being occupied by numerous employees. There are no fire escapes on the building at Grafton used as a laundry, bakery and power house. There are employees living on the third floor of this building. No standpipes were ever installed in Pines A, Pines C or Elms A buildings. These are all occupied by a large number of patients, and are not properly protected from the danger of fire. Additional standpipes and hose racks should be installed in the building at Worcester, if this building is to be rendered entirely safe. The Commissioner of Public Records has called attention to the need of a fireproof record room at the Worcester Department, and to the necessity of installing a cement floor and metal furniture in the record room at Grafton. A combination chemical and hose wagon is badly needed at the Grafton Department. The loss by fire of the barn at the Oaks group, a year ago, called attention to the inadequate fire protection now available at the Grafton Department. Owing to the hilly nature of the ground and the condition of the roads at the present time, it would be impossible to use a fire engine. Under the circumstances, I would suggest the purchase of a combination chemical and hose wagon, which would cost not to exceed \$3,500. In view of the fact that the buildings at Grafton now represent an investment of approximately \$1,000,000, this would represent a very modest expenditure for fire protection. The total amount asked for would, I think, be sufficient to cover the needs of the institution as far as fire protection is concerned for many years.

5. *Hydrotherapeutic Equipment, \$6,000.* — Your attention is again called to the fact that this institution, the largest one for the insane in the State, has, with the exception of one tub for continuous baths, no hydrotherapeutic apparatus. The equipment of a modern hospital for the care of the insane is certainly not complete without a modern hydrotherapy room and tubs for prolonged baths. The amount requested would enable us to install the necessary equipment in both the Grafton and Worcester departments.

6. *Boiler, Blowers and Grates for the Power Plant, Grafton, \$8,000.* — The boiler capacity at the power house at the Grafton

ton Department is inadequate to meet the needs of the institution. It is difficult at the present time to discontinue the use of any of the boilers for the purpose of cleaning the tubes, etc. An additional boiler is absolutely necessary for the purpose of keeping the institution properly heated. Blowers and grates will also be required. Blowers and grates are necessary for the two old boilers which were removed from the Elms boiler house to the power plant.

7. *Laundry Machinery, \$3,700.* — The equipment of the laundry at Grafton is now practically complete with the exception of a flat-work ironer. The old mangle which has been in use for many years is nearly worn out, needing frequent repairing, and should be replaced as soon as possible.

8. *Window Guards, \$2,800.* — New window guards should be purchased for practically all the buildings in the hospital, as the old window guards are entirely unsatisfactory and do not prevent the escape of patients. This is too large an undertaking for any one year, and I would recommend the partial replacement of these guards annually. For this purpose an appropriation of \$2,800 is requested.

9. *New Barns for Cows and Horses, \$35,000.* — The barns used at the present time for horses and cattle are located in the immediate vicinity of the administration building, an arrangement which is for many reasons entirely unsatisfactory. During the past summer it was necessary to install new floors in the cow barn to prevent serious injury to the cattle. The barns are in a very bad state of repair, and should be replaced during the coming year. The amount asked for will furnish accommodations for 24 horses and 100 cows. A new piggery is also badly needed. Owing to the difficulty in getting sufficient funds for such a purpose, it may be desirable to defer the erection of a piggery until some future date.

#### *Maintenance.*

The appropriation necessary for the maintenance of the hospital for the coming year will be \$650,810, which is \$125,379.08 more than the amount expended during the current year. This increase is due to various factors. The average daily population of the hospital during the year ending Novem-

ber 30 was 1,871.05. The population during the coming year will be well over 2,000 patients. It is hardly necessary to call attention to the increase in the cost of food supplies. The increase in the cost of fuel alone, as nearly as can be estimated at this time, will be \$33,000. The increase in the amount requested for salaries and wages is made necessary by the additional employees, and by the fact that higher wages must be paid if the work of the institution is to be carried on properly. The cost of the increase in the wage schedule will be approximately \$33,000, if the wages are to equal those paid in other hospitals. The per capita cost of maintenance during the year ending Nov. 30, 1916, was \$4.58 per week, or \$238.32 per year. The per capita cost for the year just ended was \$5.39 per week, or \$280.52 per year. The cost of maintenance for next year, if the amount requested is granted, will be approximately \$6.33 per week, a very reasonable increase, when the cost of all commodities is taken into consideration.

The appropriation for the present year would not have been sufficient if the hospital had maintained a full force of employees. As this institution has not been fully equipped or furnished, I am of the opinion that the amounts requested are the result of a very considerate estimate of the needs of the hospital.

Respectfully submitted,

JAMES V. MAY,  
*Superintendent.*

## TREASURER'S REPORT.

*To the Trustees of the Grafton State Hospital.*

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1917:—

## CASH ACCOUNT.

Balance Dec. 1, 1916, . . . . . \$10,149 92

## Receipts.

*Institution Receipts.*

## Board of inmates:—

Private, . . . . .	\$2,085 29
Reimbursements, insane, . . .	10,777 78
	—————
	\$12,863 07

## Sales:—

Travel, transportation and office expenses, . . . . .	\$65 70
Clothing and materials, . . .	462 62
Furnishings and household supplies, . . . . .	126 87
Medical and general care, . . .	137 52

## Farm and stable:—

Cows and calves, . . . . .	\$303 00
Hides, . . . . .	45 14
Use of teams, . . . . .	12 00
Sundries, . . . . .	2 70
	—————
	362 84

Repairs, ordinary, . . . . .	188 13
	—————
	1,343 68

## Miscellaneous receipts:—

Interest on bank balances, . . . . .	\$297 41
Sundries, . . . . .	147 81
	—————
	445 22
	—————
	14,651 97

Sales, account of industries fund, . . . . .

244 86

*Receipts from Treasury of Commonwealth.*

## Maintenance appropriations:—

Balance of 1916, . . . . .	\$18,914 95
Advance money (amount on hand November 30), . . . . .	40,000 00
Approved schedules of 1917, . . . . .	\$477,604 05
Less returned, . . . . .	86 38
	—————
	477,517 67
	—————
	536,432 62

Special appropriations, . . . . .

1,424 14

Industries fund, . . . . .

28 79

Total, . . . . . \$562,932 30

*Payments.*

## To treasury of Commonwealth:—

Institution receipts, . . . . .	\$14,651 97
Industries fund, . . . . .	244 86

## Maintenance appropriations:—

Balance November schedule, 1916, . . . . .	\$29,331 87
Eleven months' schedules, 1917, . . . . .	477,517 67
November advances, . . . . .	22,492 07
	529,341 61

## Special appropriations:—

Approved schedules, . . . . .	\$1,424 14
Less advances, last year's report, . . . . .	267 00
	1,157 14

## Industries fund:—

Approved schedules, . . . . .	28 79
Balance Nov. 30, 1917:—	
In bank, . . . . .	\$14,817 80
In office, . . . . .	2,690 13
	17,507 93
Total, . . . . .	\$562,932 30

## MAINTENANCE.

Appropriation, current year, . . . . .	\$524,200 00
Balance from previous year, brought forward, . . . . .	1,230 92
	_____
Total, . . . . .	\$525,430 92
Expenses (as analyzed below), . . . . .	524,888 40
	_____
Balance reverting to treasury of Commonwealth, . . . . .	\$542 52

## ANALYSIS OF EXPENSES.

## Salaries, wages:—

James V. May, M.D., superintendent, . . . . .	\$3,713 71
General administration, . . . . .	52,499 77
Medical service, . . . . .	11,934 20
Ward service (male), . . . . .	28,521 74
Ward service (female), . . . . .	30,600 69
Repairs, . . . . .	20,719 40
Farm and stable, . . . . .	21,989 01
Grounds, . . . . .	1,998 92
	_____
	\$171,977 44

## Religious instruction:—

Catholic, . . . . .	\$956 00
Jewish, . . . . .	300 00
Protestant, . . . . .	789 50
	_____
	2,045 50

## Travel, transportation and office expenses:—

Advertising, . . . . .	\$117 10
Automobiles, . . . . .	2,760 00
Automobile repairs and supplies, . . . . .	4,942 34
Postage, . . . . .	679 34

Amounts carried forward, . . . . .	\$8,498 78	\$174,022 94
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<i>Amounts brought forward, . . . . .</i>	<b>\$8,498 78</b>	<b>\$174,022 94</b>
<b>Travel, transportation and office expenses — <i>Con.</i></b>		
Printing and binding, . . . . .	634 63	
Printing annual report, . . . . .	179 80	
Stationery and office supplies, . . . . .	1,089 11	
Telephone and telegraph, . . . . .	1,531 72	
Travel, . . . . .	1,505 06	
Sundries, . . . . .	6 70	
Freight, . . . . .	40 25	
		<b>13,486 05</b>
<b>Food: —</b>		
Butter, . . . . .	\$8,074 68	
Butterine, . . . . .	6,594 06	
Beans, . . . . .	2,619 19	
Crackers, etc., . . . . .	795 93	
Canned soups, . . . . .	12 24	
Cereals, rice, meal, etc., . . . . .	4,259 06	
Cheese, . . . . .	1,169 04	
Eggs, . . . . .	3,892 96	
Flour, . . . . .	33,399 68	
Fish (fresh, cured and canned), . . . . .	4,410 37	
Fruit (fresh), . . . . .	950 16	
Fruit (dried and preserved), . . . . .	4,752 89	
Lard and substitutes, . . . . .	1,824 96	
Macaroni and spaghetti, . . . . .	509 65	
Meats, . . . . .	35,295 63	
Milk (fresh and substitutes), . . . . .	8,959 45	
Molasses and syrups, . . . . .	1,199 03	
Potatoes, . . . . .	9,758 17	
Seasonings and condiments, . . . . .	1,234 78	
Sugar, . . . . .	5,756 10	
Tea, coffee, cocoa, etc., . . . . .	4,147 53	
Vegetables (fresh), . . . . .	2,224 29	
Vegetables (canned and dried), . . . . .	1,200 67	
Yeast, baking powder, etc., . . . . .	359 77	
Sundries, . . . . .	27 65	
Freight, . . . . .	847 19	
		<b>144,275 13</b>
<b>Clothing and materials: —</b>		
Boots, shoes and rubbers, . . . . .	\$3,942 11	
Clothing (outer), . . . . .	8,228 99	
Clothing (under), . . . . .	1,352 97	
Dry goods for clothing, . . . . .	2,784 47	
Hats and caps, . . . . .	203 73	
Leather and shoe findings, . . . . .	451 49	
Machinery for manufacturing, . . . . .	184 39	
Socks and smallwares, . . . . .	1,369 15	
Sundries, . . . . .	80	
Freight, . . . . .	83 36	
Industries equipment, . . . . .	661 82	
		<b>19,263 28</b>
<b>Furnishings and household supplies: —</b>		
Beds, bedding, etc., . . . . .	\$16,047 71	
Carpets, rugs, etc., . . . . .	1,363 71	
<i>Amounts carried forward, . . . . .</i>	<b>\$17,411 42</b>	<b>\$351,047 40</b>

<i>Amounts brought forward,</i>	.	.	.	.	\$17,411 42	\$351,047 40
<b>Furnishings and household supplies — <i>Con.</i></b>						
Crockery, glassware, cutlery, etc.,	:	.	.	.	2,490 37	
Dry goods and smallwares,	.	.	.	.	5,138 21	
Electric lamps,	.	.	.	.	917 81	
Fire hose and extinguishers,	.	.	.	.	245 49	
Furniture, upholstery, etc.,	.	.	.	.	2,119 41	
Kitchen and household wares,	.	.	.	.	6,327 93	
Laundry supplies and materials,	.	.	.	.	5,164 07	
Lavatory supplies and disinfectants,	.	.	.	.	1,326 97	
Machinery for manufacturing,	.	.	.	.	75 73	
Table linen, paper napkins, towels, etc.,	.	.	.	.	1,557 88	
Sundries,	.	.	.	.	68 00	
Freight,	.	.	.	.	293 96	
Industrial equipment,	.	.	.	.	1,889 66	
						45,026 91
<b>Medical and general care: —</b>						
Books, periodicals, etc.,	.	.	.	.	\$243 25	
Entertainments, games, etc.,	.	.	.	.	1,096 04	
Funeral expenses,	.	.	.	.	1,203 50	
Gratuities,	.	.	.	.	1 35	
Ice and refrigeration,	.	.	.	.	280 14	
Laboratory supplies and apparatus,	.	.	.	.	255 59	
Medicines (supplies and apparatus),	.	.	.	.	2,391 67	
Medical attendance (extra),	.	.	.	.	1,028 29	
Patients boarded out,	.	.	.	.	3,261 92	
Return of runaways,	.	.	.	.	386 19	
Tobacco, pipes, matches,	.	.	.	.	1,869 94	
Water,	.	.	.	.	1,812 85	
Sundries,	.	.	.	.	45 60	
Freight,	.	.	.	.	80 37	
						13,956 70
<b>Heat, light and power: —</b>						
Coal,	.	.	.	.	\$53,492 58	
Freight on coal and other expenses,	.	.	.	.	19,790 80	
Gas,	.	.	.	.	62 39	
Oil,	.	.	.	.	511 41	
Operating supplies for boilers and engines,	.	.	.	.	795 21	
Sundries,	.	.	.	.	5 00	
Freight,	.	.	.	.	14 00	
						74,671 39
<b>Farm and stable: —</b>						
Bedding materials,	.	.	.	.	\$624 94	
Blacksmithing and supplies,	.	.	.	.	362 68	
Carriages, wagons and repairs,	.	.	.	.	215 27	
Dairy equipment and supplies,	.	.	.	.	98 85	
Fertilizers,	.	.	.	.	312 73	
Grain, etc.,	.	.	.	.	10,586 41	
Hay,	.	.	.	.	4,727 41	
Harnesses and repairs,	.	.	.	.	378 23	
Horses,	.	.	.	.	1,485 00	
Cows,	.	.	.	.	65 00	
Other live stock,	.	.	.	.	176 92	
Rent,	.	.	.	.	75 00	
<i>Amounts carried forward,</i>	.	.	.	.	\$19,108 44	\$484,702 40

*Amounts brought forward, . . . . .* \$19,108 44 \$484,702 40

Farm and stable — *Con.*

Road work and materials, . . . . .	152 71
Spraying materials, . . . . .	52 25
Stable and barn supplies, . . . . .	245 41
Tools, implements, machines, etc., . . . . .	1,031 27
Trees, vines, seeds, etc., . . . . .	606 83
Veterinary services, supplies, etc., . . . . .	134 50
Freight, . . . . .	235 77
	21,567 18

Grounds: —

Fertilizers, . . . . .	\$31 65
Road work and materials, . . . . .	64 05
Tools, implements, machines, etc., . . . . .	139 59
Trees, vines, shrubs, seeds, etc., . . . . .	164 00
Freight, . . . . .	30
	399 59

Repairs, ordinary: —

Cement, lime, crushed stone, etc., . . . . .	\$1,385 15
Electrical work and supplies, . . . . .	1,330 55
Hardware, iron, steel, etc., . . . . .	2,041 57
Lumber, etc. (including finished products), . . . . .	2,014 91
Paint, oil, glass, etc., . . . . .	2,378 37
Plumbing and supplies, . . . . .	2,518 34
Roofing and materials, . . . . .	259 02
Steam fittings and supplies, . . . . .	2,896 08
Tools, machines, etc., . . . . .	413 05
Boilers, repairs, . . . . .	637 38
Engines, repairs, . . . . .	157 62
Freight, . . . . .	243 74
	16,275 78

Repairs and renewals: —

Autopsy room, . . . . .	\$346 57
Insulating and refrigeration, . . . . .	458 33
Operating-room equipment, . . . . .	291 55
Tearing down chimney, . . . . .	200 00
Window guards, . . . . .	647 00
	1,943 45

Total expenses for maintenance, . . . . . \$524,888 40

SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1916, . . . . .	\$2,564 31
Expended during the year (see statement annexed), . . . . .	\$1,424 14
Reverting to treasury of Commonwealth, . . . . .	30
	1,424 44
Balance Nov. 30, 1917, . . . . .	\$1,139 87

## RESOURCES AND LIABILITIES.

*Resources.*

Cash on hand, . . . . .	\$17,507 93
November cash vouchers (paid from advance money), on account of maintenance, . . . . .	22,492 07
Due from treasury of Commonwealth from avail- able appropriation account November, 1917, schedule, . . . . .	7,370 73
	—————
	\$47,370 73

*Liabilities.*

Schedule of November bills, . . . . .	\$47,370 73
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## PER CAPITA.

During the year the average number of inmates has been 1,871.05.

Total cost for maintenance, \$524,888.40.

Equal to a weekly per capita cost of \$5.3948.

Receipt from sales, \$1,343.68.

Equal to a weekly per capita of \$0.0138.

All other institution receipts, \$13,308.29.

Equal to a weekly per capita of \$0.1367.

## INDUSTRIES FUND.

Balance Dec. 1, 1916, . . . . .	\$235 63
Receipts credited, . . . . .	244 86
	—————
	\$480 49

Expenditures, approved schedules (see statement annexed), . . . . .	\$28 79
Balance Nov. 30, 1917, . . . . .	451 70
	—————
	\$480 49

*Expenditures.*

## Materials:—

Rent of booth at fair, . . . . .	\$20 00
Electric work at fair, . . . . .	3 60
Expenses to and from fair, . . . . .	5 19
	—————
	\$28 79

*Special Appropriations.*

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Grafton Colony construction, . . . . .	1912, chap. 679; 1914, chap. 30, . . . . .	\$410,000 00	\$808 17	\$409,999 70	\$0 30 <sup>1</sup>
Repairing old house at colony No. 2, . . . . .	1913, chap. 133, . . . . .	3,300 00	569 97	2,279 17	1,120 83
Female nurses' home, . . . . .	1913, chap. 133, . . . . .	36,300 00	46 00	36,280 96	19 04
		\$449,600 00	\$1,424 14	\$448,559 83	\$1,139 87

<sup>1</sup> Reverting to treasury of the Commonwealth.

Respectfully submitted,

HIRAM L. HORSMAN,

*Acting Treasurer.*

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

ALONZO D. COOK.

## INMATES' FUND.

Cash on hand Dec. 1, 1916, . . . . .	\$6,653 60
Received from inmates, . . . . .	\$1,687 60
Interest, Worcester Bank and Trust Company, . . . . .	61 36
Interest, Mechanics Savings Bank, . . . . .	114 94
	1,863 90
	\$8,517 50
Cash refunded, . . . . .	\$1,297 53
Paid to Massachusetts Commission on Mental Diseases, . . . . .	1,490 93
	2,788 46
Balance Nov. 30, 1917 (Worcester Bank and Trust Company, \$2,629.42; Mechanics Savings Bank, \$2,960.76; drawer, \$138.86), . . . . .	\$5,729 04

## VALUATION.

Nov. 30, 1917.

## REAL ESTATE.

Land (923 acres), . . . . .	\$258,133 58
Buildings, . . . . .	1,660,059 50
	<hr/>
	\$1,918,193 08

## PERSONAL PROPERTY.

Travel, etc., . . . . .	\$6,493 96
Food, . . . . .	15,614 16
Clothing, . . . . .	19,445 87
Furnishings, . . . . .	69,835 60
Heat, light and power, . . . . .	13,703 77
Repairs and improvements, . . . . .	33,096 08
Farm, stable and grounds, . . . . .	25,724 40
Medical and general care, . . . . .	4,715 88
Industries, . . . . .	9,034 04
	<hr/>
	\$197,663 76

## SUMMARY.

Real estate, . . . . .	\$1,918,193 08
Personal property, . . . . .	197,663 76
	<hr/>
	\$2,115,856 84



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# STATISTICAL TABLES

AS ADOPTED BY AMERICAN MEDICO-PSYCHOLOGICAL  
ASSOCIATION.

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PREScribed BY MASSACHUSETTS COMMISSION ON MENTAL DISEASES.

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TABLE 1. — *General Information.*

1. Date of opening as an institution for the insane:	Oct. 23, 1877.
2. Type of institution:	State.
3. Hospital plant:—	
Real estate, including buildings, . . . . .	\$1,879,233 58
Personal property, . . . . .	197,663 76
<hr/>	
Total, . . . . .	\$2,076,897 34
Total acreage of hospital, 923.26.	
Acreage under cultivation during year, 102.23.	
4. Medical service:—	
Superintendent, . . . . .	Men. 1    Women. —    Total. 1
Assistant physicians, . . . . .	7    2    9
Medical internes, . . . . .	—    —    —
Clinical assistants, . . . . .	—    1    1
<hr/>	
Total, . . . . .	8    3    11
5. Employees:—	
Graduate nurses, . . . . .	Males. —    Females. 20    Total. 20
Other nurses and attendants, . . . . .	73    69    142
Social workers, . . . . .	—    —    —
All other employees, . . . . .	125    93    218
<hr/>	
Total, . . . . .	198    182    380
6. Percentage of patients employed during year, .	Men. 50.4    Women. 46.8    Total. 48.8

TABLE 2. — *Financial Statement.*

See treasurer's report for data requested under this table.

TABLE 3.—*Movement of Patient Population for the Year ending Sept. 30, 1917.*

	INSANE.		
	Males.	Females.	Totals.
1. Patients on books of institution Sept. 30, 1916, . . .	837	962	1,799
Admissions during year:—			
(a) First admissions, . . . . .	24	12	36
(b) Readmissions, . . . . .	30	13	43
Total admissions, . . . . .	54	25	79
(c) Transfers from other institutions for the insane, .	230	165	395
2. Total received during year, . . . . .	284	190	474
3. Total under treatment during year, . . . . .	1,121	1,152	2,273
Discharged from books during year:—			
(a) As recovered, . . . . .	2	—	2
(b) As improved, . . . . .	18	9	27
(c) As unimproved, . . . . .	16	8	24
(d) As not insane, . . . . .	7	12	19
(e) Transferred to other institutions for the insane, .	13	4	17
(f) Died during year, . . . . .	107	89	196
4. Total discharged from books during year, . . . . .	163	122	285
5. Patients remaining on books of institution Sept. 30, 1917, .	958	1,030	1,988
<i>Supplementary Data.</i>			
6a. Average daily number of patients on books during year,	888.06	989.75	1,877.81
6b. Average daily number of patients actually in institution during year.	859.86	952.64	1,812.30
7a. Average daily number of patients in family care, . . .	—	22.91	22.91
7b. Average daily number of patients on visit and escape, .	28.20	14.20	42.40
8. Number of voluntary patients admitted during year, .	5	2	7
9. Number of temporary-care cases admitted during year, .	—	—	—
10. Number of patients actually remaining in institution Sept. 30, 1917.	919	1,001	1,920
State, . . . . .	895	963	1,858
Reimbursing, . . . . .	20	34	54
Private, . . . . .	4	4	8
11. Number of patients in family care Sept. 30, 1917, . . .	—	18	18
State, . . . . .	—	18	18
Private, . . . . .	—	—	—
12. Number of different persons within the year, . . . . .	1,120	1,151	2,271
13. Number of different persons admitted from the community.	54	25	79
14. Number of different persons dismissed, exclusive of transfer.	150	119	269
15. Number of non-insane patients or inmates in institution at end of institution year.	—	—	—

TABLE 4.—*Nativity of First Admissions and of Parents of First Admissions.*

NATIVITY.	PATIENTS.			PARENTS OF MALE PATIENTS.			PARENTS OF FEMALE PATIENTS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
United States, . . . . .	20	10	30	9	7	16	2	1	3
Canada, . . . . .	-	1	1	2	3	5	1	1	2
England, . . . . .	-	1	1	-	1	1	1	1	2
Ireland, . . . . .	2	-	2	4	4	8	2	3	5
Russia, . . . . .	1	-	1	-	1	1	-	-	-
Scotland, . . . . .	-	-	-	2	1	3	-	-	-
Total foreign born, . . .	3	2	5	8	10	18	4	5	9
Unascertained, . . . . .	1	-	1	7	7	14	6	6	12
Grand total, . . . . .	24	12	36	24	24	48	12	12	24

TABLE 5.—*Citizenship of First Admissions.*

	Males.	Females.	Totals.
Citizens by birth, . . . . .	20	10	30
Citizens by naturalization, . . . . .	-	-	-
Aliens, . . . . .	-	-	-
Citizenship unascertained, . . . . .	4	2	6
Total, . . . . .	24	12	36

TABLE 6.—*Psychoses of First Admissions.*

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
Senile, total, . . . . .	. . . . .	. . . . .	. . . . .	-	1	1
Simple deterioration, . . . . .	-	1	1			
General paralysis, . . . . .	. . . . .	. . . . .	. . . . .	2	-	2
With other brain or nervous diseases, total, . . . . .	. . . . .	. . . . .	. . . . .	1	-	1
Tabes, . . . . .	1	-	1			
Epileptic, total, . . . . .	. . . . .	. . . . .	. . . . .	7	6	13
Deterioration, . . . . .	7	6	13			
Not insane, total, . . . . .	. . . . .	. . . . .	. . . . .	14	5	19
Epilepsy without psychosis, . . . . .	1	-	1			
Mental deficiency without psychosis, . . . . .	13	5	18			
Total, . . . . .	. . . . .	. . . . .	. . . . .	24	12	36

TABLE 7.—*Race of First Admissions classified with Reference to Psychoses.*

RACE.	TOTAL.		SENILE.		GENERAL PARALYSIS.		WITH OTHER BRAIN OR NERVOUS DISEASES.		EPILEPTICS.		NOT INSANE.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
English,	10	4	14	—	—	—	—	—	1	—	1	2	10	
French,	1	1	2	—	1	—	—	—	—	—	1	—	—	
German,	—	1	1	—	—	—	—	—	—	—	1	1	—	
Irish,	10	4	14	—	—	—	1	—	—	—	4	1	5	
Scandinavian,	—	1	—	—	—	—	—	—	—	—	1	—	—	
Scotch,	1	2	3	—	—	—	1	—	—	—	2	—	—	
Slavonic,	1	—	1	—	—	—	—	—	—	—	—	1	—	
Unascertained,	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total,	24	12	36	—	1	1	2	—	2	1	7	6	13	
											14	5	19	

TABLE 8.—*Age of First Admissions classified with Reference to Principal Psychoses.*

TABLE 8. — *Age of First Admissions classified with Reference to Principal Psychoses. — Concluded.*

PSYCHOSES.	YEARS.						
	45-50.	50-55.	55-60.	60-65.	65-70.	70-75.	75-80.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.
Senile, . . . . .	—	—	—	—	—	—	—
General paralysis, . . . . .	—	—	—	—	—	—	—
Other brain or nervous diseases, . . . . .	—	—	—	—	—	—	—
Epileptic, . . . . .	1	—	1	2	3	—	—
Not insane, . . . . .	—	—	—	—	—	—	—
Total, . . . . .	1	—	1	1	2	3	—

TABLE 9.—*Degree of Education of First Admissions classified with Reference to Psychoses.*

Psychoses.	Total.		ILLITERATE.		COMMON SCHOOL.		HIGH SCHOOL.		COLLEGE.		UNASCI- TAINED.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Senile,	—	1	1	—	—	—	—	—	—	—	1	—
General paralysis,	2	—	2	—	—	—	—	—	2	—	—	—
With other brain or nervous diseases,	1	—	1	—	—	—	—	—	1	—	—	—
Epileptic,	7	6	13	1	1	2	—	—	6	3	9	—
Not insane,	14	5	19	11	3	14	1	1	2	1	3	—
Total,	24	12	36	12	4	16	1	1	8	4	12	3
									3	—	1	1
									—	—	2	2

TABLE 10.—*Environment of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			URBAN.			RURAL.			UNASCER-TAINED.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Senile, . . . . . . .	-	1	1	-	-	-	-	1	1	-	-	-
General paralysis, . . . . .	2	-	2	2	-	2	-	-	-	-	-	-
With other brain or nervous diseases, .	1	-	1	1	-	1	-	-	-	-	-	-
Epileptic, . . . . . .	7	6	13	7	6	13	-	-	-	-	-	-
Not insane, . . . . . .	14	5	19	10	3	13	3	2	5	1	-	1
Total, . . . . . . .	24	12	36	20	9	29	3	3	6	1	-	1

TABLE 11.—*Economic Condition of First Admissions classified with Reference to Principal Psychoses.*

TABLE 12.—*Use of Alcohol by First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.			ABSTINENT.			INTEMPERATE.			UNASCERTAINED.		
	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.
	Males.		Females.	Males.		Females.	Males.		Females.	Males.		Females.
Senile,	—	1	—	1	—	1	—	—	—	—	—	—
General paralysis,	2	—	—	2	—	—	1	—	1	—	1	—
With other brain or nervous diseases,	1	—	—	1	—	—	1	—	1	—	—	—
Epileptic,	7	6	13	6	13	5	11	—	—	1	1	2
Not insane,	14	5	19	14	5	19	—	—	—	—	—	—
Total,	24	12	36	20	11	31	2	—	2	2	1	3

TABLE 13.—*Marital Condition of First Admissions classified with Reference to Principal Psychoses.*

PSYCHOSES.	TOTAL.		SINGLE.		MARRIED.		WIDOWED.		SEPARATED.		DIVORCED.		UNASCERTAINED.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Senile,	1	1	—	—	—	—	—	—	1	1	—	—	—	—
General paralysis,	2	—	—	—	—	—	2	—	—	—	—	—	—	—
With other brain or nervous diseases,	1	—	1	—	—	—	1	—	—	—	—	—	—	—
Epileptic,	7	6	13	7	3	10	—	—	2	2	—	—	—	—
Not insane,	14	5	19	14	4	18	—	—	1	1	—	—	—	—
Total,	24	12	36	21	7	28	3	4	7	—	1	1	—	—

TABLE 14. — *Psychoses of Readmissions.*

PSYCHOSES.	Males.	Females.	Totals.	Males.	Females.	Totals.
With cerebral arteriosclerosis, . . . . .				1	-	1
General paralysis, . . . . .				12	4	16
With cerebral syphilis, . . . . .				1	-	1
With other brain or nervous diseases, total, . . . . .				1	-	1
Tabes, . . . . .	1	-	1			
Alcoholic, total, . . . . .				2	-	2
Acute hallucinosis, . . . . .	1	-	1			
Chronic hallucinosis, . . . . .	1	-	1			
With other somatic diseases, total, . . . . .				1	-	1
Delirium of unknown origin, . . . . .	1	-	1			
With constitutional psychopathic inferiority, . . . . .				1	-	1
Epileptic, total, . . . . .				9	9	18
Deterioration, . . . . .	8	8	16			
Clouded state, . . . . .	1	1	2			
Undiagnosed, . . . . .				1	-	1
Not insane, total, . . . . .				1	-	1
Epilepsy without psychosis, . . . . .	1	-	1			
Total, . . . . .				30	13	43

TABLE 15.—Discharges of Patients classified with Reference to Principal Psychoses and Condition of Discharge.

TABLE 16.—*Causes of Death of Patients classified with Reference to Principal Psychoses.*

TABLE 16.—*Causes of Death of Patients classified with Reference to Principal Psychoses.*—Continued.



TABLE 16.—*Causes of Death of Patients classified with Reference to Principal Psychoses*—Continued.

PSYCHOSES—CON.



TABLE 17.—*Age of Patients at Time of Death classified with Reference to Principal Psychoses.*

TABLE 17.—*Age of Patients at Time of Death classified with Reference to Principal Psychoses*—Concluded.

TABLE 18.—*Total Duration of Hospital Life of Patients Dying in Hospital classified According to Psychoses.*

PSYCHOSES.	TOTAL.	MONTHS.										YEARS.										
		LESS THAN 1.			1-3.			4-7.			8-12.			1-2.			3-4.			5-10.		
		Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Traumatic,																						
Senile,																						
With cerebral arteriosclerosis,																						
General paralysis,																						
With other brain or nervous diseases,																						
Alcoholic,																						
Due to drugs and other exogenous toxins,																						
With other somatic diseases,																						
Manic-depressive,																						
Dementia praecox,																						
Paranoia and paranoic conditions,																						
With mental deficiency,																						
With constitutional psychopathic inferiority,																						
Epileptic,																						
Not insane,																						
Total,																						
	107	89	196	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	9	4	13	18
																			37	19	14	33

TABLE 18.—*Total Duration of Hospital Life of Patients Dying in Hospital classified According to Psychoses*—Concluded.

YEARS.	PSYCHOSES.										TOTALS.												
	10-15.			15-20.			20-25.			25-30.			30-35.			35-40.			40-45.			45-50.	
	Males.	Females.	Males.	Males.	Females.	Males.	Males.	Females.	Males.	Males.	Females.	Males.	Males.	Females.	Males.	Males.	Females.	Males.	Males.	Females.	Males.	Females.	
Traumatic,	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Senile,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
With cerebral arteriosclerosis,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
General paralysis,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
With other brain or nervous diseases,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Alcoholic,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Due to drugs and other exogenous toxins,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
With other somatic diseases,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Manic-depressive,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Dementia praecox,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Paranoia and paranoid conditions,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
With mental deficiency,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
With constitutional psychopathic inferiority,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Epileptic,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Not insane,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Total,	19	18	37	7	8	15	5	1	6	7	10	17	5	2	7	1	5	6	3	1	4	2	

TABLE 19.—*Family Care Department.*

		Males.	Females.	Totals.
Remaining Sept. 30, 1916,	.	-	29	29
Admitted within the year,	.	1	14	15
From institution,	.	-	12	12
From escape, nominally,	.	-	2	2
From visit, nominally,	.	1	-	1
Whole number of cases within the year,	.	1	43	44
Dismissed within the year,	.	1	25	26
Returned to institution,	.	-	21	21
Died,	.	-	2	2
Discharged,	.	1	2	3
Escaped,	.	-	-	-
On visit,	.	-	-	-
Remaining Sept. 30, 1917,	.	-	18	18
Supported by State,	.	-	18	18
Private,	.	-	-	-
Self-supporting,	.	-	-	-
Number of different persons within the year,	.	-	36	36
Number of different persons admitted,	.	-	11	11
Number of different persons dismissed,	.	-	20	20
Daily average number,	.	-	22.91	22.91
State,	.	-	22.91	22.91
Private,	.	-	-	-
Self-supporting,	.	-	-	-







